



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

March 14, 2002

Ms. Lori Fritz
Acting Assistant Manager for Environmental Management
DOE-Oak Ridge Operations
P.O. Box 2001, EM-90
Oak Ridge, TN 37831

Mr. John Owsley, Director
Tennessee Department of Environment and Conservation
Department of Energy Oversight Division
761 Emory Valley Road
Oak Ridge, TN 37830-7072

Dear Ms. Fritz and Mr. Owsley:

Recommendations on Deletion of Milestones for Mixed Transuranic Wastes from the Site Treatment Plan for Mixed Wastes on the DOE Oak Ridge Reservation, October 2001

At our March 13, 2002, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendations.

We appreciate your consideration of our recommendations and look forward to receiving your written responses.

Sincerely,

A handwritten signature in black ink that reads "Luther V. Gibson, Jr.".

Luther V. Gibson, Jr.
Chair

Enclosure

cc/enc: Bill Childres, TDEC
Pat Halsey, DOE-ORO
Connie Jones, EPA Region 4
Gary Riner, DOE-ORO



Oak Ridge Site Specific Advisory Board

Recommendations on Deletion of Milestones for Mixed Transuranic Wastes from the *Site Treatment Plan for Mixed Wastes on the DOE Oak Ridge Reservation, October 2001*

BACKGROUND

Mixed transuranic (TRU) wastes—highly radioactive materials mixed with hazardous chemicals—are some of the most toxic substances stored on the Department of Energy's (DOE's) Oak Ridge Reservation. These wastes fall into three classes:

- Supernate, which is slated for disposal at the Nevada Test Site (NTS)
- Contact-handled (CH), which consists of low-level activity solids that will be treated and disposed of at the Waste Isolation Pilot Plant (WIPP) in New Mexico
- Remote-handled (RH), which are high-level sludges that will be treated and disposed of at WIPP when it is permitted to accept this waste class

Approximately 1100 m³ of solid CH wastes and 550 m³ of solid RH wastes are stored at Oak Ridge National Laboratory, and approximately 750 m³ of TRU sludges are contained in the Melton Valley Storage Tanks. Oak Ridge has more than 80% of the RH TRU waste in the DOE complex.

DOE's annual *Oak Ridge Reservation Site Treatment Plan* (STP) spells out how and when these and other mixed wastes will be disposed of. But on October 31, 2001, DOE notified the Tennessee Department of Environment and Conservation (TDEC) that it was removing mixed TRU requirements, including enforceable milestones (deadlines), from the STP. The reason, DOE said, was that this waste is no longer subject to STP requirements because of a statutory change regarding WIPP.

WIPP is not authorized under its existing permit to accept RH TRU waste. But in 1996 Congress amended the WIPP Land Withdrawal Act and established that DOE did not have to treat mixed TRU waste designated for disposal at WIPP to meet the land disposal restrictions of the Resource Conservation and Recovery Act (RCRA). According to DOE, the Land Withdrawal Act eliminates the need for all DOE sites to treat mixed TRU waste to such standards prior to disposal at WIPP.

DISCUSSION

The Oak Ridge Site Specific Advisory Board (ORSSAB) heard discussion on the topic at its February 13 meeting from both DOE and TDEC. The ORSSAB Waste Management Committee further examined the issue in detail at its February 20, 2002, meeting.

DOE has stated publically that it intends to process and dispose of mixed TRU wastes regardless of whether there is a regulatory milestone to do so. As assurance of its commitment, DOE points to its \$197 million firm-fixed price contract with Foster-Wheeler Environmental Corporation to process all legacy TRU waste on the Oak Ridge Reservation. The processing facility is under construction, and the project is on schedule. According to DOE's TRU manager Gary Riner (and a statement made by DOE's Rod Nelson at the January 9 ORSSAB meeting), DOE has no plans to slow down the project and it is currently scheduled to begin processing of RH TRU in January 2003.

The RH TRU milestone is problematic for DOE because WIPP is not currently licensed to accept this waste stream. This means that if DOE goes forward with processing this waste as proposed in the STP, the agency will have to store processed RH TRU in concrete over-packs on a pad next to the TRU processing facility until WIPP can accept it. This would require double handling (assuming the waste is eventually transferred to WIPP), and because the processed material would be a dried powder, it might present more of a risk than the material currently poses in storage.

A possible path forward for DOE would be to process supernate from the Melton Valley Storage Tanks first, followed by CH TRU solids. DOE could go ahead with the original schedule of shipping supernate to NTS and CH TRU to WIPP. RH TRU sludges could be delayed until WIPP can accept them. Delaying sludge shipment will affect amortization of the Foster-Wheeler contract, however, so DOE will have to adjust the contract so that DOE assumes some of the liability.

TDEC's position is that DOE is interpreting the WIPP Land Withdrawal Act out of context and that the act refers only to WIPP and not to requirements at other DOE sites, such as Oak Ridge. The agency also questions why DOE waited 5 years after the act was signed to bring up the issue.

The state further contends that even if it is conceded that there was an intent to remove land disposal restrictions from mixed TRU wastes at places other than WIPP, the amendment does not affect state law and regulations in an authorized hazardous waste program, such as the one in place in Tennessee.

"Tennessee has its own version of the RCRA land ban, and this is the law in Tennessee," said TDEC's Bill Childres in a letter to DOE. "There is no indication in the legislative history that shows Congress intended to drastically reduce the state authority over mixed waste found in the Federal Facilities Act of 1992."

To bolster its case, TDEC points out that since enactment of the STP, mixed wastes in Oak Ridge have been reduced by more than 60%. Legacy low-level wastes, which do not have state regulatory milestones, continue to accumulate. This fact leads TDEC to question if the TRU wastes will be expeditiously disposed without a regulatory driver.

In ORSSAB deliberations on the issue, another key rationale for keeping the milestones in the STP was identified. The FY 2002 budget for the Oak Ridge Environmental Management Program has been reduced to the point where regulatory milestones for cleanup projects are having to be renegotiated with TDEC and EPA. And with a proposed FY 2003 cleanup budget of \$20 million less than in 2002, ORSSAB questions how DOE can guarantee that funding to dispose of this waste can be secured in such a climate. Keeping milestones in the STP is security against the loss of funding for the project, which can occur not only through the annual DOE budget process but also through shifting priorities as federal administrations change.

RECOMMENDATIONS

ORSSAB recommends that DOE reverse its position on removing mixed TRU milestones from the STP and restore them to the document. ORSSAB recommends that DOE go forward with completion of its TRU treatment facility and proceed with treatment of mixed TRU supernate and CH wastes. ORSSAB recommends to DOE and TDEC that milestones for RH TRU treatment remain in the STP but that they be extended until WIPP can obtain a permit to accept this waste class.